

*Lysimachia quadrifolia* L. In dry woods near Bridge Creek, not common. This may be the southernmost known station for it. Dr. Mohr knew it only from Sand and Lookout Mountains.

*Pinguicula pumila* Mx. Sandy bogs near springs on Golsan's farm. Known to Dr. Mohr only from Baldwin and Mobile Counties, but I found it in similar places in Chilton County a few years ago.\* In the central pine belt it grows larger than it does farther south, and might be mistaken for *P. elatior* in dried specimens, but the color of the corolla is more like that of *P. pumila* than *P. elatior*.

*Utricularia subulata* L. With or near the preceding. Commoner southward, but grows also on Lookout Mountain.

UNIVERSITY, ALA.

## A TRIP TO EL YUNQUE, PORTO RICO

ELIZABETH G. BRITTON

From the windows of our rooms at the Condado, the Luquillo Range of mountains—filling the northeastern end of the Island—loomed up, misty and blue in the early morning, or cloud-capped in the afternoon, and continually tempted us to come and see its wonders! One of the keenest disappointments of all our West Indian journeys had been that I was unable to join my husband and a party of botanists in a camping trip from Naguabo in 1913 to El Duque at the other end of the range. Having helped to take care of the plants and studied the mosses from that trip, I could faintly imagine what treasures awaited us on El Yunque. It is called the "Anvil" from the flat top so characteristic of the northeastern end of the range, and is 3,700 feet high.

Through the courtesy of the Forestry Department of the Federal Government of Porto Rico, and the kindness of Mr. Murray Bruner—Chief Forester—all arrangements were made for us to start from Mameyes on horse-back by the Catalina trail, for a "week-end" visit to the forest-ranger's huts of the Luquillo Forest Reserve. So we motored down to the Mameyes River, bag and baggage, ready to "rough it" and get wet.

\* See *Torreyia* 22: 59. 1922.

The cabins were comfortable and water-proof and we spent three nights there, a party of five botanists, and several of the native foresters came to help in the day-time. The trail up is through sugar and coffee plantations and yielded little of much interest until we reached the station at about 1500 feet. We arrived there in time to take a short walk along the newly stoned trail, toward the summit, and become a little familiar with the more common plants at the lower altitudes. Here we found *Hillia parasitica* with its starry white waxy blossoms, and *Magnolia splendens* with showy cream-colored flowers; passion-flowers and *Anihuriums* climbed the trees, mistletoes and ferns perched upon them, tree-ferns mingled with them and ferns and mosses covered the ground. *Selaginellas* and *Lycopodiums* were abundant, and hepatics and lichens helped to make a bewildering luxuriance of plant growth.

The ferns were particularly abundant and represented by many genera—*Asplenium* and *Adiantum*, *Polypodium* and *Rhipidopteris*, *Trichomanes*, and *Hymenophyllum*, *Vitaria* and *Elaphoglossum* in abundance and beauty. We were particularly pleased with *Oleandra articulata*—its simple glossy fronds pendent in large masses on the trunks of trees—and a few ground orchids, and an interesting *Aperia* were also found.

The first good moss collected was on the shady side of a big boulder in the bed of a stream, crossing the path—*Homalia glabella* and with it *Fissidens polypodioides*. Masses of *Macromitrium mucronifolium* and *Leucoloma serrulatum* made cushions on trees and stumps. *Leucobryum crispum* and *L. Martianum* were abundant and mixed with species of *Campylopus*, which in the tropics takes the place of the *Dicranums* which are usually so abundant on our northern mountains. The old logs were fascinating places to linger over, searching for filmy ferns, hepatics, and mosses.

A comfortable night on clean new cots with plenty of blankets and good camp fare, with delicious Porto Rican coffee, started us off next day rested and keen for our trip to the summit. The horses took us part of the way up—as far as the trail was possible for them to go; the rest of the way was too steep and muddy, so we left them with a care-taker and started off—each of us with a “practico” or forest-ranger to help us, and began collecting. Mr. Bruner and Dr. Britton watched for new or interesting

trees and kept the men with the machetes busy. My big basket soon was overflowing and particularly fine clumps of ferns and lycopodiums were left to be picked up on the way down. So many stops were made and such interesting specimens found, that we were neither tired nor out of breath when we reached the wonderful rain-forest of the flat ridge below the summit of El Yunque. Of all tropical mountains that we have ever climbed, this has the densest vegetation and is most unspoiled by the ravages of man. The trees were so covered with mosses and hepatics, that the trunks were invisible, and ferns and orchids grew upon them in masses. The rare fern *Hymenodinium crinitum* was exceedingly abundant and of large size. *Olferisia cernua*, *Trichomanes crispum* and *Hymenophyllum polyanthos* were also abundant,—*Elaphoglossums* and *Gesnerias* hung from the trees, and a beautiful white epiphytic orchid *Octadesmia montana* grew on the bushes along the path. Dense cushions of a rare moss—only found on high mountains—*Hemiragis aurea* were everywhere and mixed with it were pillows of *Macromitriums*. The *Hookeriaceae* also were abundant, and *Hookeriopsis acicularis* covered the stones in the path. Another beautiful moss of this family found hanging at the end of twigs—*Isodrepanium lentulum* with its symmetric branching and glossy leaves made it particularly lovely and tempting. Mixed with it were our old friends of the Blue Mountains of Jamaica—*Meteoropsis remotifolia*, *Pilotrichella flexilis*, *Phyllogonium fulgens*, and *Thuidium acuminatum*. Also quite familiar and abundant were *Porotrichum insularum* and *Clastobryum trichophyllum*.

On the last muddy scramble a few plants of *Hookeria acutifolia* were found. In the crevices of the rocks on the bare summit were dense black masses of *Thysanomitrium Richardi* and in these wet cushions grew a tiny pale *Utricularia*, now called *Setiscapella pusilla*. Two rare ferns also grew in the crevices of the rock in wet cushions of mosses—*Psilogramme Portoricensis* and *Pleurogramme minor* but were not abundant.

As we sat down to lunch, it began to rain and drove us away from the exposed and windy ledges to the shelter of the forest—but even here there was little comfort, and we turned homeward—realizing that our baskets and packs were full and absorbing water all the time. So it was a wet and tired party that dragged into camp a few hours later, soaked through and through.

Part of the next day it rained and we stayed indoors and were kept busy sorting and pressing the most perishable parts of the collections. Fortunately, mosses, hepatics, and lichens can wait for light and comfort, so they were bundled up and carried down to the Condado, where with plenty of running water, cloths and trash baskets, it took four days more to clean and arrange and number my collection, and the subsequent study has shown it to be one of the largest and most interesting of all our red-letter day gatherings.

NEW YORK BOTANICAL GARDEN.

### SHORTER ARTICLES

A NEW BOG-ASPHODEL FROM THE MOUNTAINS.—Four known species have heretofore comprised the genus *Abama*. Two American, one on the eastern coast and one of the western coastal region. The other two are European and Japanese respectively. The following or fifth species may be described as:

***Abama montana*** Small, sp. nov. Perennial with a fibrous-coated rootstock, sometimes tufted: basal leaves erect, mostly 1–2.5 dm. long, narrowly linear, about 8-veined, acuminate: flowering stem 3–5 dm. tall, slender, glabrous, with several remote narrow leaves which clasp the stem: raceme 5–8 cm. long, rather loosely flowered: bracts setaceous, mostly 3–8 mm. long: pedicels about twice as long as the bracts, slender: perianth yellow: sepals almost linear, 6 mm. long, 3-veined: petals narrowly linear-lanceolate, 3-veined: stamens about 4 mm. long; anthers fully 1.5 mm. long: capsule narrowly conic, shorter than the persistent perianth.—Swamp near Flat Rock, North Carolina.

It is not surprising that a bog-asphodel should come to light in the mountains of North Carolina, as several kinds of plants otherwise known only in the pine-barrens of the middle Atlantic Coastal Plain also grow in the Appalachians. However, it is interesting that the plant in question is a different species from that of the lowlands. It is scarce, evidently rare, and may be on the verge of extinction. It may be that in this species we have one of the progenitors of the *Abama* of the Coastal Plain, for the high mountain region was the reservoir whence many of our Coastal Plain plants were derived.